BREAKING BARRIERS: A COMPREHENSIVE STUDY ON CHALLENGES FACED BY WOMEN IN CYBERSECURITY SAMAH MANSOUR AND ANDREW KALAFUT

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AGENDA

BACKGROUND MAIN CHALLENGES PRESENTATION GOAL SURVEY DESIGN RESPONSE RATE AND DEMOGRAPHICS RESULTS RECOMMENDATIONS



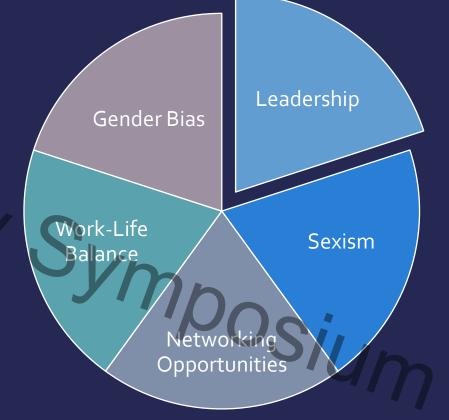
BACKGROUND

- The cybersecurity industry has been rapidly expanding due to increasing cyber threats, which in turn requires a diverse and skilled workforce.
 - Despite industry growth, women remain significantly underrepresented in cybersecurity roles, particularly in leadership (Peacock and Irons)*

 * Peacock, D Alastair Irons, A (International Journal of Gender, Science and Technology, Vol.9, No.1)

CHALLENGES WOMEN FACE IN THE CYBERSECURITY FIELD

- Leadership: Women are underrepresented in cybersecurity roles, particularly in leadership positions.
- Gender Bias: The cybersecurity sector continues to be shaped by gender bias, limiting the career advancement and job satisfaction of women in the field. Research has highlighted significant gaps in diversity, particularly in recruitment processes and opportunities for professional growth.
- Networking Opportunities: Women often face barriers e.g. a lack of role models and inadequate networking opportunities, which can hinder career progression.
- Work-life balance: Adequate time for caregivers, personal time, and job satisfaction among women in cybersecurity.
- Sexism: Pay disparities and sexual harassment for female employees



PRESENTATION GOAL

This presentation examines women's persistent challenges in cybersecurity and proposes remedial strategies.

SURVEY DESIGN

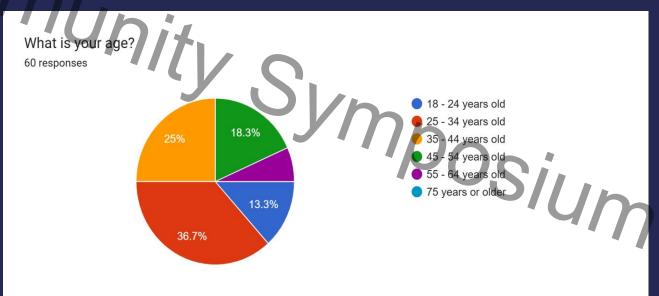


- Gender bias
- Work-life balance values
- Networking opportunities for women
- Representation in leadership
- Sexism
- > The survey was distributed using LinkedIn.
- The survey implementation emphasized voluntary participation and anonymity, supported by a secure submission process to ensure confidentiality



RESPONSE RATE AND DEMOGRAPHICS

- We received 60 responses.
- 9 responses were incomplete and subsequently excluded from the analysis, leaving us with 51 complete and usable responses.
- This sample was representative of our targeted demographic, which encompasses professional women in the cybersecurity field with varying roles and experiences.



RESULTS

Leadership

- 23% of survey respondents with 6-10 years of experience suggest inequality in leadership opportunities
- 65% postgraduates point to low advancement opportunities
- Work life balance
 - 51% of participants find work-life balance challenging in the cybersecurity field
 - 71% make personal sacrifices to meet job demands
- Networking opportunities
 - Only 60% of respondents believe they have been provided adequate opportunities for professional connections and networking.
- Sexism
 - 51% of respondents have witnessed or experienced sexual harassment in the workplace
 - 20% of the respondents do not agree that there are efforts to address equal pay
- Gender Bias
 - 61% of the respondents have witnessed discriminatory behavior.
 - 76% of respondents agree that gender diversity would benefit the industry, contributing to need for policy changes.

RECOMMENDATIONS

- 1. Create targeted mentorship and sponsorship programs to help women advance into leadership positions.
- WiCyS and WomSA provide mentorship and professional development opportunities.

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- 2. Introduce flexible working arrangements to help women balance their professional and personal responsibilities, especially for those with caregiving duties.
- We can achieve better security with a diversity of voices contributing. Accommodating these needs can help increase diversity of thought in the field. Don't penalize people for using flexible working arrangements when selecting leadership.
- 3. Create and support networking groups and events that are tailored for women in cybersecurity to foster community and peer support.
 - Organizations such as NDIA and Amazon AWS Women of the cloud organize such events.
- 4. Perform regular pay audits to identify and address any gender-related pay gaps and ensure equal pay for equal work by standardizing salary ranges and bonuses for similar roles, regardless of gender.
- 5. Provide training to all employees, including management, on unconscious bias and the importance of diversity and inclusion, as well as preventing harassment and discrimination.